

# POWER DIVIDERS

## 0° : 2-WAY

### LEADLESS SURFACE-MOUNT



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX			
0.1 - 100	25/20	25/22	23/20	0.2/0.4	0.25/0.6	0.4/1.0	2.0	2.0	2.0	0.2	0.2	0.2	133	3	SPD-C2
1 - 500	35/25	32/25	30/20	0.3/0.6	0.35/0.7	0.6/1.0	2.0	3.0	4.0	0.2	0.3	0.3	133	3	SPD-C1
2 - 300	25/20	30/20	25/20	0.5/0.9	0.6/0.8	0.8/1.0	3.0	4.0	5.0	0.4	0.5	0.5	134	1	SD-1
5 - 500	25/20	30/20	25/20	0.4/0.7	0.5/0.8	0.6/1.0	3.0	4.0	5.0	0.4	0.4	0.6	134	2	SD-2
10 - 1000	25/20	30/17	25/17	0.5/0.8	0.6/1.0	1.0/1.5	2.0	4.0	7.0	0.4	0.5	0.7	134	2	SD-3
10 - 1000	25/20	30/20	25/17	0.5/0.8	0.6/1.0	1.0/1.5	2.0	4.0	7.0	0.4	0.5	0.7	147	4	SPD-M-3
10 - 1000	22/19	19/17	18/15	0.4/0.8	0.7/1.2	1.2/1.5	2.0	3.0	5.0	0.2	0.3	0.5	133	3	SPD-C5
400 - 2700	-/-	-/-	25/20	-/-	-/-	1.0/1.5	-/-	-/-	6.0	-/-	-/-	0.5	133	3	SPD-C12†
500 - 1500	20/15	20/15	20/15	0.6/0.8	0.7/0.8	0.8/1.0	3.0	4.0	5.0	0.3	0.4	0.5	133	3	SPD-C4
700 - 1000	20/15	20/15	20/15	0.6/0.8	0.6/0.8	0.8/1.0	3.0	4.0	5.0	0.3	0.4	0.5	133	3	SPD-C3

### LEADLESS SURFACE-MOUNT



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX			
850 - 960	-/-	-/-	27/20	-/-	-/-	0.6/1.0	-/-	-/-	5.0	-/-	-/-	0.4	133	3	SPD-C1-2†
1600 - 1700	-/-	-/-	26/21	-/-	-/-	0.8/1.2	-/-	-/-	3.0	-/-	-/-	0.6	133	3	SPD-C7†
1600-1900	-/-	-/-	24/18	-/-	-/-	0.3/0.5	--	--	2.0	--	--	0.2	218	6	SPD-C10†
1725 - 1900	-/-	-/-	25/20	-/-	-/-	0.4/0.6	-/-	-/-	4.0	-/-	-/-	0.4	124S	5	DSS-927†
2000 - 2100	-/-	-/-	26/21	-/-	-/-	0.4/0.6	-/-	-/-	3.0	-/-	-/-	0.6	133	3	SPD-C8†
2000 - 2200	-/-	-/-	25/20	-/-	-/-	0.8/1.2	-/-	-/-	3.0	-/-	-/-	0.6	124S	5	DSS-928†
2200 - 2400	-/-	-/-	25/20	-/-	-/-	0.8/1.2	-/-	-/-	3.0	-/-	-/-	0.6	124S	5	DSS-929†
800 - 1000	-/-	-/-	20/14	-/-	-/-	0.5/0.8	-/-	-/-	5.0	-/-	-/-	0.5	232	6	M2D810†
1800 - 2200	-/-	-/-	20/15	-/-	-/-	0.5/1.0	-/-	-/-	6.0	-/-	-/-	0.7	231	6	M2D1822†
2000 - 2550	-/-	-/-	20/15	-/-	-/-	0.5/1.0	-/-	-/-	6.0	-/-	-/-	0.7	231	6	M2D2025†

Notes:

Power Rating(All Models) = 1 watt, max

† (UB) - Denotes full bandwidth specification

For pin location and package outline drawings, see back pages.

LB	= LF to 10 LF
MB	= 10 LF to HF/2
UB	= HF/2 to HF

PIN-OUT TABLE

	INPUT	OUTPUT	*GROUND
#1	2	4,6	1,3,5
#2	6	3,4	1,2,5
#3	3	1,2	4,5,6
#4	1	2,4	3
#5	1	4,16	All other
#6	1	2,3	All other

\*GROUND = Ground externally

# POWER DIVIDERS

## 0° : 2-WAY

### LEADED SURFACE-MOUNT



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
2 - 300	25/20	30/20	25/20	0.5/0.9	0.6/0.8	0.8/1.0	3.0	4.0	5.0	0.4	0.5	0.5	159	1	<b>SDL-1</b>
2 - 500	35/18	35/25	27/20	0.3/0.8	0.3/0.6	0.5/1.0	1.0	2.0	3.0	0.15	0.2	0.3	159	2	<b>SDL-173</b> ■
2 - 1000	35/25	27/17	23/17	0.5/0.6	0.7/0.9	1.2/1.5	1.0	2.0	4.0	0.2	0.3	0.6	159	2	<b>SDL-100</b>
5 - 500	25/20	30/20	25/20	0.4/0.7	0.5/0.8	0.6/1.0	3.0	4.0	5.0	0.4	0.4	0.6	159	2	<b>SDL-2</b>
5 - 750	25/18	30/23	23/17	0.6/1.4	0.8/1.6	1.5/1.8	1.0	3.0	5.0	0.2	0.3	0.5	159	2	<b>SDL-174</b> ■
5 - 500	25/20	30/20	25/20	0.4/0.7	0.5/0.8	0.6/1.0	3.0	4.0	5.0	0.4	0.4	0.6	134J	2	<b>SDZ-2</b>
10 - 1000	25/20	30/17	25/17	0.5/0.8	0.6/1.0	1.0/1.5	2.0	4.0	7.0	0.4	0.5	0.7	159	2	<b>SDL-3</b>
10 - 1000	25/20	30/17	25/17	0.5/0.8	0.6/1.0	1.0/1.5	2.0	4.0	7.0	0.4	0.5	0.7	134J	2	<b>SDZ-3</b>
20 - 2000	20/15	20/15	25/15	0.6/0.8	0.7/1.0	0.8/1.5	2.0	3.0	5.0	0.2	0.3	0.5	159	2	<b>SDL-6</b>
500 - 1500	20/15	20/15	18/13	0.6/0.8	0.7/0.8	1.0/1.4	3.0	4.0	7.0	0.3	0.4	0.7	159	2	<b>SDL-4</b> ♦
700 - 900	-/-	-/-	23/20	-/-	-/-	0.5/0.8	-/-	-/-	2.0	-/-	-/-	0.5	134J	2	<b>SDZ-125</b> †
1200 - 1600	-/-	-/-	25/18	-/-	-/-	1.0/1.5	-/-	-/-	3.0	-/-	-/-	0.3	159	2	<b>SDL-5</b> †
1700 - 2500	-/-	-/-	20/16	-/-	-/-	0.8/1.3	-/-	-/-	10	-/-	-/-	0.9	159	2	<b>SDL-7</b> †

### *New!* SYNSTRIP® SURFACE MOUNT



FREQUENCY RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB)	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR	PACKAGE	PIN-OUT (See Below)	MODEL
	Full Band TYP/MIN	Full Band TYP/MAX	Full Band TYP/MAX	Full band TYP/MAX	TYP/MAX			
650 - 1200	22/12	0.2/0.3	1.0/2.0	±0.15/0.20	1.3/1.5:1	234	3	<b>S2D6512</b> **
800 - 1200	25/20	0.2/0.4	1.0/2.0	±0.2/0.4	1.3/1.4:1	234	3	<b>S2D8120</b> ‡§
1400 - 2600	20/12	0.3/0.4	1.0/2.0	±0.20/0.25	1.3/1.5:1	245	3	<b>S2D1426</b> **
2000 - 2500	25/18	0.3/0.4	1.0/2.0	±0.2/0.4	1.3/1.4:1	234	3	<b>S2D2025</b> ¥

Notes:

- 75 Ohm Model
- Power Rating(All Models) = 1 watt, max
- ♦ LB = 500-700 MHz, MB = 750-1000 MHz, UB = 1000-1500 Mhz
- † (UB) - Denotes full bandwidth specification
- \* Expanded frequency range available
- ‡ Expanded frequency range available
- \*\* 50 Ohms, 5 Watts with mismatch of 1.2:1 or less
- ¥ 50 Ohms, 10 Watts with mismatch of 1.2:1 or less

PIN-OUT TABLE

	INPUT	OUTPUT	*GROUND
#1	2	4,6	1,3,5
#2	6	3,4	1,2,5
#3	1	2,3	All other

\*GROUND = Ground externally

For pin location and package outline drawings, see back pages.

LB = LF to 10 LF
MB = 10 LF to HF/2
UB = HF/2 to HF



# POWER DIVIDERS

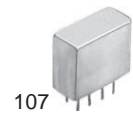
## 0° : 2-WAY

### THROUGH HOLE MOUNT (8 Pin-Relay Can)



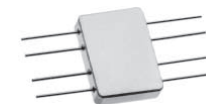
FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
0.004-60	27/20	30/20	27/20	0.3/0.6	0.3/0.6	0.6/1.0	2.0	3.0	4.0	.15	.25	0.3	102	1	DSP-2B1
0.01-100	30/20	27/20	25/20	0.3/0.6	0.3/0.5	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.2	102	1	DSP-201
0.1-400	20/15	25/20	25/20	0.2/0.6	0.4/.75	0.6/1.0	2.0	3.0	4.0	.15	0.2	0.3	102	1	DSP-2A3
0.25-300	20/15	30/20	20/15	0.4/.75	0.4/.75	0.4/1.0	2.0	3.0	5.0	.15	0.2	0.3	102	1	DSP-2A2 ■
0.5-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	3.0	0.2	0.2	0.2	103	1	DSP-202
1-400	28/20	28/20	25/20	0.4/.65	0.5/0.8	0.7/1.0	3.0	3.0	4.0	0.3	0.3	0.3	103	1	DSP-209
1-650	30/20	28/20	25/20	0.4/0.5	0.4/0.8	0.8/1.0	2.0	3.0	5.0	.15	0.2	0.3	102	1	DSP-222
5-2000	21/16	22/18	19/14	0.2/0.5	0.5/0.8	0.8/1.1	1.0	3.0	5.0	0.2	0.4	0.6	102	1	DSP-2A6
10-850	31/20	32/23	23/15	0.3/0.5	0.4/0.6	0.5/1.0	2.0	5.0	10.0	0.1	0.2	0.5	102	1	DSP-2D4 ■
10-1000	30/20	28/20	25/20	0.2/0.5	0.6/1.0	0.9/1.2	2.0	4.0	6.0	0.2	0.2	0.4	102	1	DSP-212
10-1000	30/25	25/20	25/20	0.6/1.0	0.6/1.2	0.7/1.2	2.0	8.0	10.0	.15	0.2	0.4	102	1	DSP-2C4
10-1400	28/18	22/17	24/17	0.3/0.6	0.6/1.0	0.9/1.6	2.0	3.0	4.0	.15	0.2	0.4	102	1	DSP-2A5

### MINI RELAY HEADER (4-Pin and 8 Pin)



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
0.1-450	20/15	30/20	30/20	0.3/0.5	0.4/.75	0.6/1.0	2.0	3.0	4.0	.15	0.2	0.3	107	1	DSP-4B4
1-400	30/25	30/25	30/20	.25/0.5	0.5/.75	0.7/1.0	2.0	3.0	4.0	.15	0.2	0.6	106	2	DSP-3C3
1-400	28/20	28/20	25/20	0.4/.65	0.5/0.8	0.7/1.0	3.0	3.0	4.0	0.3	0.3	0.3	105	2	DSP-309
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.3	105	2	DSP-302
1-400	28/20	28/20	25/20	0.4/.65	0.5/0.8	0.7/1.0	3.0	3.0	4.0	0.3	0.3	0.3	107	1	DSP-409
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/2.0	2.0	2.0	2.0	0.2	0.2	0.3	107	1	DSP-402
2-650	22/18	30/20	22/18	0.3/0.5	0.5/0.8	0.8/1.2	1.0	2.0	4.0	0.3	0.2	0.3	107	1	DSP-4A4
5-1500	18/16	20/16	20/14	0.6/0.8	0.6/0.8	0.6/1.1	2.0	3.0	5.0	0.2	0.3	0.4	107	1	DSP-4A5

### FLAT-PACK



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
1-500	25/20	30/20	30/20	0.4/0.7	0.4/0.7	0.5/1.2	2.0	2.0	3.0	0.2	0.2	0.2	101	3	DSF-102
2-1500	25/20	25/20	18/15	0.8/1.3	0.5/1.0	1.0/1.5	2.0	4.0	8.0	0.2	0.3	0.4	101	3	DSF-103
5-1000	30/20	30/23	25/20	0.3/0.5	0.5/0.8	0.6/1.0	3.0	2.0	5.0	0.2	0.2	0.2	101	3	DSF-109

Notes: ■ 75 Ohm Model

Power Rating(All Models) = 1 watt, max

For pin location and package outline drawings, see back pages.

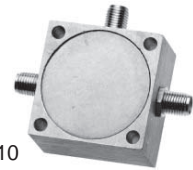
LB = LF to 10 LF  
 MB = 10 LF to HF/2  
 UB = HF/2 to HF

PIN-OUT TABLE

	INPUT	OUTPUT	CASE GROUND
#1	1	5,6	All Other
#2	1	2,4	3
#3	8	1,5	All other

# POWER DIVIDERS

## 0° : 2-WAY



110

### COAXIAL CONNECTOR

FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
0.01-100	30/20	27/20	25/20	0.3/0.6	0.3/0.5	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.2	110	1	DSK-701*
0.25-300	20/15	30/25	25/20	0.4/.75	0.4/.75	0.4/1.0	2.0	3.0	5.0	.15	0.2	0.3	110	1	DSK-7A2B ■
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	3.0	0.2	0.2	0.2	110	1	DSK-702*
1-750	30/20	28/20	25/20	0.2/0.5	0.4/0.8	0.8/1.0	2.0	4.0	4.0	.15	.15	0.3	110	1	DSK-7E4*
2-200	35/30	35/30	35/30	0.2/0.5	0.3/0.5	0.4/0.5	1.0	1.0	1.0	0.2	0.2	0.2	110	1	DSK-7M2*
2-1500	25/20	25/20	25/20	0.8/1.3	0.6/1.2	0.5/1.5	2.0	4.0	6.0	0.2	0.2	0.3	110	1	DSK-703*
5-400	40/30	38/30	35/30	0.2/0.4	0.3/0.5	0.4/0.5	2.0	2.0	2.0	0.2	0.2	0.2	110	1	DSK-718*
5-500	35/30	40/30	35/30	0.3/0.5	0.3/0.5	0.4/.65	2.0	2.0	3.0	0.2	0.2	0.2	110	1	DSK-717*
10-1000	30/20	30/20	25/20	0.2/0.5	0.5/1.0	0.9/1.2	2.0	3.0	5.0	.15	.15	0.3	110	1	DSK-712*
10-1000	30/25	33/25	30/25	0.2/0.5	0.4/0.7	0.6/0.8	2.0	2.0	3.0	0.2	0.2	0.25	110	1	DSK-709*

### COAXIAL CONNECTOR



144

164

206

220

215

FREQUENCY RANGE	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See)	MODEL
	LB	MB	UB	LB	MB	UB	LB	MB	UB	LB	MB	UB			
5-2000	25/20	25/20	23/15	0.6/0.9	0.9/1.4	1.2/1.8	2.0	3.0	5.0	0.2	0.3	0.4	144	2	DSK-726S
700-900	-/-	-/-	30/24	-/-	-/-	0.3/1.0	-	-	5.0	-	-	0.5	164	2	DSK-724S †
800-2200	-/-	-/-	22/20	-/-	-/-	0.4/0.5	-	-	2.0	-	-	0.4	215	2	DSK-729S †
800-2400	-/-	-/-	20/18	-/-	-/-	0.6/0.8	-	-	4.0	-	-	0.5	206	2	DSK-H3N †
1700-2200	-/-	-/-	20/18	-/-	-/-	0.3/0.4	-	-	3.0	-	-	0.3	220	2	DSK-H1N †

Power Rating (All Models) = 1 Watt, max  
 \* Select female connector suffix: "B" = BNC, "S" = SMA, "N" = Type N, "T" = TNC  
 ■ 75 Ohm Model  
 † (UB) - Denotes full bandwidth specification  
 For pin location and package outline drawings, see back pages.

PIN-OUT TABLE

	INPUT	OUTPUT	CASE GROUND
#1	2	1,3	--
#2	1	2,3	--

LB = LF to 10 LF  
 MB = 10 LF to HF/2  
 UB = HF/2 to HF

# POWER DIVIDERS

## 0° : 2-WAY

### THROUGH HOLE (TO-8 and TO-5)



FREQUENCY RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB)			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			PACKAGE	PIN-OUT (See Below)	MODEL
	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN	LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB MAX	MB MAX	UB MAX	LB MAX	MB MAX	UB MAX			
0.01-100	30/20	27/20	25/20	0.3/0.6	0.3/0.5	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.2	122	3	DSP-601
1-100	37/30	35/30	35/30	0.2/0.5	0.3/0.5	0.4/0.5	1.0	1.0	1.0	0.1	0.1	0.1	127	2	DSP-8D1
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	3.0	0.2	0.2	0.2	122	3	DSP-602
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.2	104	1	DSP-502
1-500	25/20	30/23	30/20	0.4/0.6	0.4/0.7	0.5/1.0	2.0	2.0	2.0	0.2	0.2	0.2	126	3	DSP-802
10-1000	25/20	30/20	25/20	0.2/0.5	0.5/0.8	0.6/1.0	3.0	2.0	4.0	0.2	0.2	0.3	122	3	DSP-609

Power Rating (All Models) = 1 Watt, max  
 For pin location and package outline drawings, see back pages.

LB = LF to 10 LF
MB = 10 LF to HF/2
UB = HF/2 to HF

	INPUT	OUTPUT	CASE GROUND
#1	8	11,5	All Other
#2	3	2,4	1,5
#3	3	2,4	1